

**IN THE CLAIMS:**

None of the claims have been amended herein. All of the pending claims 24-26 and 28-31 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as previously amended.

**Listing of Claims:**

Claims 1-23. (Canceled)

24. (Previously Presented) An electronic device, comprising:  
a semiconductor substrate;  
an electrically conductive layer disposed on at least one side of the semiconductor substrate,  
comprising;  
a voltage reference plane substantially covering the at least one side of the semiconductor  
substrate and configured for operable coupling to a voltage reference signal;  
a plurality of signal trace slots disposed in the voltage reference plane; and  
a plurality of signal traces disposed in the plurality of signal trace slots;  
wherein the plurality of signal traces are electrically isolated from the voltage reference  
plane by a gap in the electrically conductive layer with a gap distance sufficient to  
avoid an electrical short between the plurality of signal traces and the voltage  
reference plane; and  
wherein the voltage reference plane provides a continuous electrical connection around  
each of the plurality of signal trace slots such that at least a portion of the voltage  
reference plane is disposed between any two of the plurality of signal traces to  
reduce cross talk between signals carried by the any two of the plurality of signal  
traces; and  
a plurality of solder balls disposed on the at least one side of the semiconductor substrate,  
wherein at least one of the plurality of solder balls is operably coupled to at least one of

the plurality of signal traces and at least one of the plurality of solder balls is operably coupled to the voltage reference signal.

25. (Previously Presented) The electronic device of claim 24, further comprising a passivation layer disposed on the electrically conductive layer.

26. (Previously Presented) The electronic device of claim 24, wherein at least one of the plurality of signal traces includes at least one direction change in the length thereof over the semiconductor substrate.

Claim 27. (canceled)

28. (Previously Presented) The electronic device board of claim 24, wherein the semiconductor substrate includes:

an electrically insulative layer disposed on the electrically conductive layer; and

an additional electrically conductive layer disposed on the electrically insulative layer, comprising;

an additional voltage reference plane substantially covering the electrically insulative layer and configured for operable coupling to the voltage reference signal;

a plurality of additional signal trace slots disposed in the additional voltage reference plane; and

a plurality of additional signal traces disposed in the plurality of additional signal trace slots;

wherein the plurality of additional signal traces are electrically isolated from the additional voltage reference plane by an additional gap in the additional electrically conductive layer with an additional gap distance sufficient to avoid an electrical short between the plurality of additional signal traces and the additional voltage reference plane; and

wherein the additional voltage reference plane provides a continuous electrical connection around each of the plurality of additional signal trace slots such

that at least a portion of the additional voltage reference plane is disposed between any two of the plurality of additional signal traces to reduce cross talk between signals carried by the any two of the plurality of additional signal traces.

29. (Previously Presented) The electronic device of claim 28, wherein at least a portion of the plurality of signal traces are operably coupled to at least a portion of the plurality of additional signal traces by vias provided through the electrically insulative layer.

30. (Previously Presented) The electronic device of claim 28, wherein the voltage reference plane is operably coupled to the additional voltage reference plane by vias provided through the electrically insulative layer.

31. (Previously Presented) An electronic system, comprising:  
a processor;  
a memory device;  
at least one input device;  
at least one output device; and  
at least one data storage device;  
wherein at least one of the processor, the memory device, the at least one input device, the at least one output device and the at least one data storage device includes an electronic device comprising:  
a semiconductor substrate; and  
an electrically conductive layer disposed on at least one side of the semiconductor substrate, comprising:  
a voltage reference plane substantially covering the at least one side of the semiconductor substrate and configured for operable coupling to a voltage reference signal;  
a plurality of signal trace slots disposed in the voltage reference plane; and  
a plurality of signal traces disposed in the plurality of signal trace slots;

wherein the plurality of signal traces are electrically isolated from the voltage reference plane by a gap in the electrically conductive layer with a gap distance sufficient to avoid an electrical short between the plurality of signal traces and the voltage reference plane; and

wherein the voltage reference plane provides a continuous electrical connection around each of the plurality of signal trace slots such that at least a portion of the voltage reference plane is disposed between any two of the plurality of signal traces to reduce cross talk between signals carried by the any two of the plurality of signal traces; and

a plurality of solder balls disposed on the at least one side of the semiconductor substrate, wherein at least one of the plurality of solder balls is operably coupled to at least one of the plurality of signal traces and at least one of the plurality of solder balls is operably coupled to the voltage reference signal.